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U.S. Army Research Institute for the Behavioral and Social Sciences

**Research Report 1611** 

# The Use of Incentives in Light Infantry Platoons

Twila J. Lindsay and Guy L. Siebold U.S. Army Research Institute



March 1992

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#### **Research Report 1611**

#### The Use of Incentives in Light Infantry Platoons

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**Education and Training** 

A primary mission of the Leadership, Personnel, and Organizational Change Technical Area of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to enhance small unit readiness and performance through research to improve leadership, cohesion, and motivation. The specific research described in this report is part of a larger project focusing on how factors at a unit's home station affect the unit's subsequent performance at one of the U.S. Army Combat Training Centers (CTCs). This larger research project is entitled "Determinants of Small Unit Performance." It is part of an even wider program of research on the determinants of CTC unit performance carried out by several ARI technical areas and field units.

This report describes the use of incentives in light infantry units. Its purpose is to document how incentives are used and the impact of that use. The results will be used to develop information and programs for unit leaders and for individual leader development. The results of an initial analysis were briefed to representatives of the Center for Army Leadership and the Combined Arms Center--Training in December 1990 at Fort Leavenworth, Kansas. The printed version of the report will be distributed to these Centers and to the leaders of the light infantry units involved in the research.

The sponsor for the research presented in this report is the Center for Army Leadership, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas. The sponsor reviewed this report and supports its publication. Research is being conducted under a Memorandum of Agreement between the U.S. Army Command and General Staff College and ARI, dated 15 November 1990, subject: "Program of Research in Support of the Center for Army Leadership." The research presented in the report was initiated under an earlier (1987) Memorandum of Agreement between the same parties.

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EDGAR M. JOHNSON Technical Director

#### EXECUTIVE SUMMARY

#### Requirement:

When combat infantry platoons are nearly or fully trained and equally equipped, the differences among them in performance are due, in part, to such intangibles as motivation and cohesion. However, a continuing problem has been verification of ways in which leaders can positively affect the levels of motivation and cohesion in their units. This research examined how standard incentives are used in light infantry platoons and tried to determine systematic relationships between standard incentives and their effect on soldier motivation, cohesion, and similar intangibles.

#### Procedure:

Data in this report were collected by questionnaire from squad members from 60 line and specialty platoons in 5 light infantry battalions. The questionnaires were administered 2 to 4 weeks before the participation of each battalion in training exercises (a rotation) at either the U.S. Army National Training Center (NTC), Fort Irwin, California, or the U.S. Army Joint Readiness Training Center (JRTC), Fort Chaffee, Arkansas. In addition, platoon mission performance ratings were provided at the JRTC by the platoon level observer/controllers (O/Cs) on 23 of the platoons. Within a month of training exercises at either the NTC or the JRTC, questionnaires were given to battalion company commanders to rate the mission performance of their platoons. Platoon personnel, including leaders, also rated their own performance at that time.

In the questionnaires, squad members were asked to rate how often incentives were used (seldom, occasionally, often) and whether they were given to the right or (sometimes) wrong people. The incentives considered were (1) public recognition for a job well done, (2) passes, (3) awards, (4) specialized training courses, (5) letters of appreciation or commendation, and (6) promotions. The questionnaire responses represent the perceptions and recollections of the squad members rather than information from unit records. In the questionnaires, soldiers were also asked about their motivation, job satisfaction, squad member cohesion, and similar soldier and unit variables.

#### Findings:

About 70% of the squad members reported that incentives were used seldom or occasionally in their units. The incentive most frequently used was "passes"; the incentive least frequently used was "letters of appreciation or commendation." For those squad members who reported that incentives were used occasionally or often in their units to reward good performance (about 70 to 75% of the squad members), around one half reported that the incentives were sometimes offered to the wrong people.

Frequent use of incentives was correlated with soldiers' job motivation, motivation to do well during the CTC training, job satisfaction, pride in being a member of the platoon, and identification with the Army. Frequent use of incentives was also correlated with more positive soldier assessments of squad member cohesion, unit climate for learning, and expected value of the upcoming CTC training. Frequent use of incentives was only marginally associated with soldier perceptions of how well the platoon was trained on individual tasks and missions. Soldiers indicating that incentives were sometimes given to the wrong people reported lower levels of the previously cited factors than did the other soldiers, except for the factor on how well trained their platoon was on individual and mission tasks.

The quantitative and interview data suggest that incentives can be better managed by unit leaders by (1) using incentives more often, (2) consulting with platoon level noncommissioned officers to ensure that incentives are given to the right people, (3) avoiding setting quotas for incentives, (4) inviting family members to ceremonies in which incentives are awarded, and (5) processing incentives so that they are awarded in a timely manner. The authors recommend also that public recognition and awards be favored over passes as incentives because the latter rewards good-performing soldiers by separating them from the unit. Nonetheless, soldiers continue to value passes and time off; they should be used as incentives when appropriate.

#### Utilization of Findings:

This report will provide feedback to the five battalions participating in the research. The findings will be incorporated into pilot programs for unit leaders to enhance the training and readiness of their units. The Center for Army Leadership, as appropriate, will use the findings in the design of training and training materials for leaders and for leadership development.

#### THE USE OF INCENTIVES IN LIGHT INFANTRY PLATOONS

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#### THE USE OF INCENTIVES IN LIGHT INFANTRY PLATOONS

#### INTRODUCTION

The purpose of this report is to describe the use of standard Army incentives in light infantry platoons and show the relation between this usage and motivation and performance. use of incentives is presented in terms of perceived frequency of use and whether incentives were perceived by soldiers as being given to the right or wrong people. The particular incentives considered were (1) public recognition for a job well done, (2) passes, (3) awards, (4) specialized training courses, (5) letters of appreciation or commendation, and (6) promotions. In terms of frequency of use, each incentive was examined by itself and collectively as the total set of incentives. Analyses were done at both the individual soldier and platoon (average) levels. Correlations were computed between the frequency of use of the incentives and key variables such as motivation and platoon performance. Each incentive was individually examined, by the investigators, to determine whether incentives were given to the right or (sometimes) wrong people. In addition, t tests were conducted to determine if soldiers who felt incentives were given to the right people reported that their motivation, expectations, job satisfaction, and other factors were higher than those of soldiers who felt that incentives were given to the wrong people.

The data for this report were obtained under a large-scale ARI research project to (1) establish the home station determinants of small unit performance at the U.S. Army Combat Training Centers (CTCs) and (2) identify areas for improvement at a unit's home station which could result in increased unit readiness. Within this larger project, it was expected that the pattern of incentive utilization in a unit would be related to major determinants of CTC performance and that the most useful incentives could be identified for affecting the determinants of performance which, in turn, would affect unit readiness.

#### **METHOD**

Data were collected by questionnaire from soldiers of 60 platoons (line infantry, scout, mortar, and anti-tank) from 5 light infantry battalions in three phases per battalion. The first phase (base) was about 4 months before each battalion was scheduled to go through a training rotation at either the U.S. Army National Training Center (NTC), Fort Irwin, CA, or the U.S. Army Joint Readiness Training Center (JRTC), Fort Chaffee, AR. The second phase (pre-rotation) was 2-4 weeks before the rotation; the third phase (post-rotation) was within 4 weeks after the training rotation. Questionnaire administration was conducted by ARI researchers. In addition, platoon mission performance ratings were provided at the JRTC by the platoon

level observer/controllers (O/Cs) on 23 of the platoons. Further, during post-rotation, company commanders rated the mission performance of their subordinate platoons using self-administered questionnaires.

Base and pre-rotation questionnaires were administered to all soldiers (squad members through platoon leader) in one company at a time in a classroom or dayroom setting. soldiers responded on machine-readable answer sheets. questionnaires consisted of about 160 items and took the average soldier about 30 minutes to complete after instructions. rotation questionnaires were short (21 items plus some unit and position identification questions) and took soldiers less than 10 minutes to complete. Responses were made on the questionnaire Post-rotation questionnaires were given at the start of group interviews to four separate groups of soldiers in a company (platoon leaders, platoon sergeants, squad leaders, and members of one intact squad). Post-rotation questionnaires, along with the subsequent group interviews, were usually given in an office or dayroom setting.

The base and pre-rotation questionnaires contained items and scales measuring standard key interpersonal and organizational constructs and various background items. The post-rotation questionnaires focused on soldier perceptions (self-ratings) of mission performance during their recent rotation. In other words, the base and pre-rotation questionnaires contained the home station determinants (predictors) of performance; the post-rotation questionnaires (platoon self-ratings) and ratings by the O/Cs and company commanders functioned as criterion measures of that performance. For greater detail, see Tremble and Alderks (1992).

The analyses prepared for this report focused on the responses from the squad members to the pre-rotation questionnaire, which included a measure of incentive use. soldiers assessed the utilization of each incentive. aggregation of responses to the items was used to assess the total level of incentive utilization. The use of each incentive was assessed by a five point scale: A = used often, given to the right people; B = used often, sometimes given to the wrong people; C = used occasionally, given to the right people; D = used occasionally, sometimes for the wrong people; E = seldom A two dimensional response scale was used due to shortage of questionnaire space. For most analyses, the scale was recoded so that 1 = seldom used (response E); 2 = used occasionally (responses C and D); and 3 = used often (responses A and B).times, as noted below, responses were recoded based on right or wrong incentive recipients. In this case, response E (seldom used) was not considered; responses B and D were recoded as 1 = incentive sometimes given to the wrong people, and responses A and C were recoded as 2 = incentive given to the right people.

#### RESULTS

#### Use of Incentives

Frequency of Use. Most squad members reported that the standard (formal) incentives were NOT frequently used. Statements supporting these reports were obtained in informal discussions (e.g., with Chaplains) and during post-rotation group The modal category of response was "used occasionally" for all six incentives. The percentage of squad members who responded that the incentives were "used often" was about the same as those who responded that the incentives were "seldom used." As shown in Table 1, the incentive most frequently reported as seldom used was "letters of appreciation or commendation." The incentive most frequently reported as used often was "passes." Overall, roughly seventy percent of the squad members rated incentives as seldom or only occasionally These descriptive results are represented in terms of means and standard deviations at the individual and platoon levels in Table 2, which also shows the relatively low use of each of the incentives. Nevertheless, a one-way analysis of variance showed that there were significant differences (p<.001) among the platoons in the frequency of incentive use.

Incentive Recipients. Reports from the squad members in terms of whether the incentives were given to the right or wrong people were examined. The results showed that when incentives were used occasionally or often, about half of the squad members reported that the incentives were sometimes given to the wrong The incentive rated most often as sometimes given to the wrong people was "promotions." The incentive rated wost often as given to the right people was "passes" (see Table 3). The more simple to use incentives (e.g., public recognition, passes) were reported as sometimes given to the wrong people about as often as the incentives requiring more paperwork. A one-way analysis of variance showed a statistically significant difference (p<.05) among the platoons in terms of whether incentives were rated as given to the wrong or right people, except for the incentive of "public recognition", for which the platoon means were not significantly different. The highest levels of statistical significance (p<.001) reached were for "awards" and "promotions."

Incentive Management. During post-rotation interviews, the platoon level leaders and squad members provided many comments about the management of incentives in their units. A frequent concern was the length of time it took for most incentives to be received. One soldier noted that he received an award 18 months after he was nominated for it. Others estimated that it often took 5-6 months, after nomination, to receive an award. A leader said, incentive awards are not tracked well. Therefore, they get lost or pulled at a higher echelon, and no one knows what happened or why an award never got through. Discussions with

Table 1
Frequency of Incentive Use: Percentage of Responses for Each
Scale Value by Incentive

Incentive	Scale value	<u> </u>
Public recognition for a job well done	1 2 3	26 47 27
Passes	1 2 3	26 43 31
Awards	1 2 3	27 49 24
Specialized training courses	1 2 3	29 47 23
Letters of appreciation or commendation	1 2 3	34 45 21
Promotions	1 2 3	20 50 29

Note.  $\underline{N}$  = 995 individual squad members. Scale values were: 1 = seldom used, 2 = used occasionally, and 3 = used often.

Table 2

Individual and Platoon Level Means and Standard Deviations for Frequency of Incentive Use by Incentive

	Individua	l level	Platoon	level
Incentive	<u>M</u>	<u>SD</u>	<u>M</u>	SD
Public recognition for a job well done	2.0	.72	2.0	.27
Passes	2.0	.75	2.0	.30
Awards	1.9	.71	1.9	.26
Specialized training courses	1.9	.72	1.8	.32
Letters of appreciation or commendation	1.8	.73	1.8	.27
Promotions	2.0	.70	2.0	.26
All six incentives	1.9	.59	1.9	.24

<u>Note</u>. For the individual level,  $\underline{N}=995$  squad members; for the platoon level,  $\underline{N}=58$  platoons. Scale used to describe the frequency of incentive use was: l=seldom used, 2=used occasionally, and 3=used often. Both a one-way analysis of variance and Kruskal-Wallis (non-parametric) test indicated that there were statistically different means between platoons on all incentives and total use of incentives (p<.001).

Table 3
Wrong or Right Incentive Recipients: Percentage of Responses for Each Scale Value by Incentive

Incentive	Scale value	<u>8</u>	n
Public recognition for a job well done	1 2	48 52	740
Passes	1 2	40 60	735
Awards	1 2	49 51	723
Specialized training courses	1 2	49 51	702
Letters of appreciation or commendation	1 2	43 57	657
Promotions	1 2	61 39	792

Note. Scale values were: 1 =sometimes given to the wrong people, and 2 =given to the right people.

higher level leaders and S-1 staff revealed that paperwork concerning punishments usually had to get processed within 1-2 weeks, by regulation, and thus took priority over paperwork concerning incentives. Leaders suggested that the amount of paperwork involved in some incentives resulted in these incentives being seldom used. Some leaders felt that the timeliness of incentive awards was especially important because many soldiers wanted immediate gratification, and also viewed timeliness as an indicator of the amount of concern that leaders had for soldiers. Likewise, some soldiers said that they were offended when some leaders received quickly processed awards while they went unrecognized for their efforts.

Another concern expressed by soldiers was that incentives were often given under a quota system. For example, after a major training event, word would come down from "higher" to recommend soldiers for incentives, but no more than so many per squad or platoon were permitted. As a result, soldiers believed that some people deserved an incentive award but did not get one because the quota was reached. Also, in some cases, people who did NOT deserve an award received one so that the squad or platoon would reach their quota. A similar concern was that squad leaders would nominate certain squad members for an incentive but someone higher up would "purge" the list or give incentives to someone not nominated by the squad leaders. squad members stated that they felt their platoon level leaders were too scared to push for an incentive award for a soldier if company level leaders objected to the list of nominees. platoon sergeant stated that his first sergeant asked him to nominate, on the spot, a squad member for promotion without allowing the platoon sergeant time to consult with the squad leader concerned. This did not allow the squad leader to have input into the affairs of the squad. The platoon sergeant indicated that this is the type of situation that can cause the wrong soldier to be promoted and motivation to suffer.

Some squad leaders felt that they could not get support from their supervisors on incentives and thus lost their ability to reinforce good performance. Squad leaders said they were held personally accountable if one of their squad members messed up but were not given any credit if a squad member received an incentive. Others felt that you had to "kiss up" to get an incentive or that leaders who wanted to give a lot of incentives were seen as "soft" by higher ups. On the other hand, some squad members said that the incentives were more often given to soldiers who looked good in uniform rather than to soldiers who actually earned an incentive award.

As a result of the difficulties surrounding the use of formal and informal incentives, platoon level leaders often preferred to use informal incentives such as granting soldiers early dismissal from duty, assigning good soldiers to easier or

more interesting details, or taking soldiers on adventure training. On the other hand, leaders and squad members felt that the use of formal incentives was most effective when family members were brought into any award ceremony, especially if the family members were frequently briefed on unit activities so that they could appreciate what the incentive meant. Also, setting up the opportunity in advance to receive a formal incentive was seen as effective. For example, soldiers may be informed that their whole squad can get a three day pass provided that all squad members pass a test at a fixed, high level. More specifically, soldiers saw incentives as effective if they knew that the soldiers having, for example, the top five scores on a test would receive an incentive, such as a three day pass. Overall, the post-rotation interviews suggest that the use of standard formal incentives was adequate but not well managed. As a result, the standard incentives may have a potential effect in building motivation and pride in many of the units.

#### Relation to Other Variables

Soldier and Unit Variables. It was anticipated that the use of incentives would be related to soldier perceptions about themselves and conditions in their unit. More specifically, it was predicted that a soldier's perceived frequency of incentive use would be correlated with soldier variables such as, job motivation, motivation to do well on the CTC rotation, job satisfaction, pride in being a member of his platoon, and identification with the Army. Likewise, it was anticipated that frequency of incentive use would be correlated with a soldier's perceptions about the unit. The unit variables included squad member cohesion, unit climate, platoon task and mission training proficiency, and how valuable the CTC training would be for his platoon. Data were analyzed at the individual soldier and platoon mean levels. Results are shown in Tables 4 and 5.

In Table 4, many of the highest correlations were between the incentives and job satisfaction and pride. Many of the highest correlations in Table 5 were between the incentives and unit climate for learning and expectations that the CTC training would be valuable. One can speculate that the unit climate and the use of incentives are closely associated. This association results in a positive unit environment. One can also speculate that the positive unit environment supports expectations that unit activities, such as a CTC training rotation, will have positive outcomes. (Unit climate was correlated with expectations that the CTC training will be valuable at r = .60, at the platoon level.)

For the incentives themselves, one can see that the total use of incentives, "All six incentives," was more strongly correlated with the soldier and unit variables than any single incentive. Thus, the total volume of incentives seems more

Table 4

Correlations Between Frequency of Incentive Use and Soldier

Variables by Incentive and Soldier Variable

	Soldier Variable					
Incentive	(1)	(2)	(3)	(4)	(5)	
Public recognition for a job well done	.23	.28 .54	.29 .51	.24	.18	
Passes	.20 .32**	.23 .33**	.26	.27	.24	
Awards	.18 .53	.23 .41	.22 .57	.24 .62	.15 .36**	
Specialized training courses	.18 .49	.20 .45	.27 .62	.24	.17 .34**	
Letters of appreciation or commendation	.13 .26*	.18	.18 .50	.25 .52	.13 .26*	
Promotions	.22	.25 .47	.27 .52	.27 .43	.22 .51	
All six incentives	.25 .53	.28 .52	.31 .65	.32 .61	.24	

Note. Soldier variables were questionnaire scales measuring: (1) job motivation, (2) motivation to do well on the CTC rotation, (3) job satisfaction, (4) pride in being a member of one's platoon, and (5) identification with the Army. Scales are provided in Appendix A; scale characteristics are described in Tremble and Alderks (1992). For each incentive, the first row of correlations is at the individual level ( $\underline{N} = 995$  individual squad members); the second row is at the platoon (mean) level ( $\underline{N} = 58$  platoons). At the individual level, all correlations are significant at p<.001. At the platoon level, the second row, all correlations are significant at the p<.001 level unless otherwise indicated; then \* = p < .05. \*\* = p < .01.

Table 5

Correlations Between Frequency of Incentive Use and Unit

Variables by Incentive and Unit Variable

		Unit V	ariable	
Incentive	(1)	(2)	(3)	(4)
Public recognition for a job well done	.21 .16x	.37	.07* .14x	.27 .61
Passes	.20 .25*	.32	.06* .10x	.22 .44
Awards	.19 .35**	.33	.07* .26*	.22
Specialized training courses	.18 .37**	.31	.07* .19x	.21
Letters of appreciation or commendation	.20 .26*	.27	.06* 03x	.21 .49
Promotions	.21 .29**	.31 .56	.05x .25*	.23 .57
All six incentives	.25 .33**	.40 .68	.08** .22*	.28 .56

Note. Unit variables were questionnaire scales measuring: (1) squad member cohesion, (2) unit climate for learning, (3) platoon task and mission proficiency, and (4) expected value of the CTC training for the platoon. Scales are provided in Appendix A; detailed scale characteristics are described in Tremble and Alderks (1992). For each incentive, the first row of correlations is at the individual level (N = 995 individual squad members); the second row is at the platoon (mean) level (N = 58 platoons). At the individual squad member level, all the correlations with unit variables (columns) 1, 2, and 4 are significant at the p<.001 level; correlations with unit variable (column) 3 are significant only if so indicated. At the platoon level, the second row in each incentive, all the correlations are significant at the p<.001 level, unless otherwise indicated; then N = 0.05. N =

important than the specific use of any given type. Nevertheless, awards and the use of specialized training courses as an incentive seemed the most influential among the incentives. However, almost all the correlations in Table 4 and 5 were significant, with the exception of those relating to squad member perceptions of how proficiently trained their platoon was. Most importantly, the more frequent use of incentives was significantly correlated with motivation (job and CTC) and cohesion factors (squad member cohesion and pride), which were strongly related to platoon CTC performance (shown later in the report).

As with a soldier's perceived frequency of incentive use, it was anticipated that a soldier's appraisal of whether incentives were given to the right or (sometimes) wrong people would be related to his job motivation, motivation to do well on the CTC rotation, job satisfaction, pride in being a member of his platoon, and identification with the Army as well as his appraisal of the unit variables. Data were analyzed at the individual soldier level. Specifically, one-tailed  $\underline{t}$  tests were performed to determine if the group mean of a variable for those perceiving that an incentive was given to the right people (Group 2) was higher than the group mean of a variable for those perceiving that an incentive was sometimes given to the wrong people (Group 1). The results are shown in Tables 6 and 7.

Tables 6 and 7 show that Group 2 means were higher than Group 1 means. Soldiers that perceived incentives as given to the right people had higher levels of motivation, job satisfaction, pride in being a member of their platoon, identification with the Army, perceptions of platoon cohesion, perceptions of a positive learning climate, and expectations that the CTC training rotation would be valuable. Perceptions of the platoon task and perceptions of mission proficiency were more or less the same for the two groups. The variables which had the largest consistent differences between the two groups were job satisfaction, the cohesion factor variables (pride and squad member cohesion), and the unit learning climate. The incentive on which the means for the two groups were the most different was public recognition for a job well done.

CTC Performance. It was expected that the more frequent use of incentives would increase motivation and cohesion, and support more positive expectations, which in turn would directly improve training performance. Thus, the correlations between frequency of incentive use and the soldier and unit variables were expected to be higher than any direct correlations between the frequency of incentive use and platoon performance criteria. Nevertheless, the authors felt it would be instructive to examine the direct correlations between the frequency of incentive use and the performance criteria, and the correlations between the soldier and unit variables and the performance criteria. These results,

Table 6
Wrong or Right Incentive Recipients: Individual Level Group
Means On the Soldier Variables by Incentive

			Soldi	er Var	iable	
Incentive	Group	(1)	(2)	(3)	(4)	(5)
Public recognition for a job well done	1 2	3.4 3.6	3.6 3.9	2.9		3.5 3.7
Passes	1 2		3.7 3.8*	3.0 3.2		
Awards	1 2	3.4 3.5x	3.7 3.9	2.9 3.2	3.4 3.7	3.5 3.7**
Specialized training courses	1 2	3.4 3.6**		2.9		3.5 3.7**
Letters of appreciation or commendation	1 2	3.4 3.5**	3.6 3.9	2.9	3.4 3.7	3.5 3.6x
Promotions	1 2	3.4 3.6	3.7 3.9**			

Note. For Group n's per incentive, see Table 3. Groups for each incentive were based on responses using the questionnaire scale: 1 = sometimes given to the wrong people, and 2 = given to the right people. Soldier variables were questionnaire scales measuring: (1) job motivation, (2) motivation to do well on the CTC rotation, (3) job satisfaction, (4) pride in being a member of one's platoon, and (5) identification with the Army. One-tailed  $\underline{t}$  tests were performed to determine if the Group 2 mean was higher than the Group 1 mean for each soldier variable, i.e., to reject the null hypothesis of no difference between the means. Differences between the Group 2 and Group 1 means are significant at  $\underline{p}$ <.001 unless otherwise indicated.  $*=\underline{p}$ <.05.  $**=\underline{p}$ <.01.  $\times$  = not significant.

Table 7
Wrong or Right Incentive Recipients: Individual Level Group
Means On the Unit Variables by Incentive

			Unit Va	riable	
Incentive	Group	(1)	(2)	(3)	(4)
Public recognition for a job well done	1 2	3.3 3.6	3.1 3.6	3.3 3.4**	3.7 4.0
Passes	1 2	3.2 3.6	3.1 3.5	3.3 3.5	3.8 3.9x
Awards	1 2	3.4 3.6	3.2 3.5	3.4 3.4x	3.7 4.0
Specialized training courses	1 2	3.3 3.6	3.2 3.5	3.4 3.4x	3.8 3.9*
Letters of appreciation or commendation	1 2	3.4 3.6	3.1 3.5	3.4 3.4x	3.7 4.0
Promotions	1 2	3.4 3.6	3.2 3.5	3.4 3.4x	3.8 4.0**

Note. For Group n's per incentive, see Table 3. Groups for each incentive were based on responses using the questionnaire scale: 1 = sometimes given to the wrong people, and 2 = given to the right people. Unit variables were questionnaire item scales measuring: (1) squad member cohesion, (2) unit climate for learning, (3) platoon task and mission proficiency, and (4) expected value of the CTC training for the platoon. One-tailed tests were performed to determine if the Group 2 mean was higher than the Group 1 mean for each soldier variable, i.e., to reject the null hypothesis of no difference between the means. The differences between the Group 2 and Group 1 means are significant at p<.001 unless otherwise indicated. \*=p<.05. \*\*=p<.01.  $\times$  = not significant.

at the platoon level, are provided in Tables 8 and 9.

As one can see from Table 8, the incentives neither directly nor consistently correlated with the performance criteria at a high level. However, awards and promotions did have significant levels of correlation with the criteria. On the other hand, the correlations between the incentives and the soldier and unit variables (Tables 4 and 5, platoon level) were noticeably higher than the correlations between the incentives and the performance criteria shown in Table 8. In essence, the major impact of incentives on platoon performance and readiness is indirect through the soldier and unit variables.

The relation between the wrong or right incentive recipients and the performance criteria was not analyzed because the analyses concerning the wrong or right recipients represented only a portion of each platoon; those responding "seldom used" were not considered. Thus, it was not appropriate to develop a platoon score. Further, there was not as strong a difference among the platoons in terms of the incentives being given to the wrong or right people; there was no significant difference among the platoons for the incentive of public recognition. addition, the frequency of use of the incentives was more dominant in its effect. For example, soldiers responding with the original response scale value B (used often, sometimes given to the wrong people) had higher mean values on the soldier and unit variables than those responding with the original response scale value D (used occasionally, sometimes for the wrong people).

As Table 9 shows, there were significant strong correlations between many of the soldier and unit variables and some of the performance criteria. Job motivation and the cohesion factor variables (pride and squad member cohesion) had the most consistently significant correlations with the criteria. It should be noted that most of the platoons in the sample were almost fully trained on their tasks and missions when the questionnaires were administered prior to their CTC training rotations; with platoon differences in training being limited, the soldier and unit variables thus could become prominent.

Table 8

Correlations Between Frequency of Incentive Use and Performance

Criteria by Incentive and Performance Criterion

	Performance Criterion			
Incentive	(1)	(2)	(3)	
Public recognition for a job well done	.13	03	.10	
Passes	.28	.03	.17	
Awards	.44*	.31*	.21	
Specialized training courses	.17	.15	.09	
Letters of appreciation or commendation	.18	05	.03	
Promotions	.40*	09	.23	
All six incentives	.28	.05	.18	

Note. Performance criteria were the average rating on mission performance for each platoon during its NTC or JRTC training rotation, with ratings being made by: (1) observer/controllers at the JRTC, (2) company commanders rating their own platoons, and (3) platoon leaders and squad members rating their own platoon's performance. Scales are provided in Appendix A; scale characteristics are described in Tremble and Alderks (1992). For each incentive, the correlations are at the platoon (mean) level. The number of platoons rated, respectively by column were: (1)  $\underline{n}$  = 22, (2)  $\underline{n}$  = 40, and (3)  $\underline{n}$  = 56. \* = p<.05.

Table 9

Correlations Between Soldier and Unit Variables and Performance

Criteria by Soldier or Unit Variable and Performance Criterion

Soldier and Unit Variable	Performance Criterion			
	(1)	(2)	(3)	
Job motivation	.64***	.32*	.27*	
Motivation to do well on the CTC training rotation	.65***	.13	.05	
Job satisfaction	.64***	.21	.21	
Pride in being a member of one's platoon	.57**	.25	.25*	
Identification with the Army	.44*	.23	.26*	
Squad member cohesion	.51**	.29*	.29*	
Unit climate for learning	.54**	.21	.33**	
Platoon task and mission proficiency	.32	.14	.46**	
Expected value of the CTC training for the platoon	.57**	18	.09	

Note. Performance criteria were the average rating on mission performance for each platoon during its NTC or JRTC training rotation, with ratings being made by: (1) observer/controllers at the JRTC, (2) company commanders rating their own platoons, and (3) platoon leaders and squad members rating their own platoon's performance. The soldier and unit variables were scales comprised of questionnaire items responded to by squad members 2 to 4 weeks prior to their NTC or JRTC training rotation. Scales are provided in Appendix A; the scale characteristics are described in Tremble and Alderks (1992). The correlations are at the platoon (mean) level. The number of platoons rated, respectively by column were: (1)  $\underline{n} = 22$ , (2)  $\underline{n} = 40$ , and (3)  $\underline{n} = 56$ . \* = p<.05. \*\* = p<.01. \*\*\*=p<.001.

#### DISCUSSION

#### Data Limitations

Prior to a discussion of the results and their implications, it is useful to discuss some of the limitations of the data used in the analysis. First of all, the research design was not set up to test causality between the use of incentives and its impact on motivation, cohesion, and the other measured variables. correlations and t tests simply indicate association and relative One can logically conclude that the prior use of differences. incentives influences the soldier and unit variables; however, the use of incentives is measured by the recollections and reports of the soldiers. Therefore, one can also conclude that the level of the other variables, like motivation, can influence recollections and perceptions about the use of incentives. the main variable measures are not independent of one another, and some portion of the association between the variables may be spurious. Nonetheless, the questionnaire data were examined under a principal component factor analysis at the individual soldier level, and the incentive items formed a separate factor (eigenvalue of 1.4; explaining about 3.5% of the variance) from other comparable questionnaire items. Thus, responses to the items on incentives were sufficiently independent to make their association with the soldier and unit variables, for the most part, non-spurious.

Second, since around seven y percent of the soldiers marked that the incentives were "seldom" or "occasionally used", the results reflect a limited range in the use of incentives. If incentives were used much more liberally, it is not clear whether the association between the use of incentives and the soldier and unit variables would still hold, especially if incentives were given out without being justly earned. In short, the data suggest that the use of incentives has not reached a point of marginal utility, but do not indicate precisely where that point of marginal utility lies. The authors suspect that a greater frequency of use of incentives along with better management of their use would increase the correlation between the use of incentives and the soldier and unit variables, as well as with the performance criteria.

Third, the incentives were measured through the use of a five point, two dimensional response scale. For analysis purposes in this report, a conservative approach was taken: the response scale was broken down into a three point (frequency of use) scale and a two point (wrong or right recipient) scale, each of one dimension. However, for the items in the questionnaire immediately preceding the incentive items and following them, the soldiers responded using five point, one dimensional scales. It is possible that some of the soldiers interpreted the five point incentive response scale as being continuous and roughly

unidimensional, thus introducing "error" into their responses. This condition may have limited the degree of association of incentive use with the soldier and unit variables. (For the treatment of the incentive response scale as a continuous, five point scale, see Appendix B and Lindsay and Siebold, 1990).

Finally, the data contain measures of only six incentives. There are other types of rewards and incentives such as time off, the esteem of one's peers, unit citations, choice of assignments or details, and "pats on the back" which were not measured. The levels of these other types of rewards and incentives may have limited or enhanced the impact of the six measured incentives on the soldier and unit variables or the frequency of use of the six measured incentives. On the other hand, while it is always desirable to be cautious about the limitations in data, the results presented in the report are probably reasonable estimates of the actual use and impact of the use of incentives in light infantry units.

#### The Importance of Incentives

The critical question concerning incentives is whether they are really important to soldier and unit readiness and performance. Obviously, the relatively small direct correlations between the use of incentives and the platoon performance criteria suggest that the use of incentives is not as critical to platoon performance as, for example, motivation or cohesion. However, the use of incentives, both in frequency and for the right recipients, is important to the soldier and unit variables examined (motivation, job satisfaction, cohesion, and so forth); these variables, in turn, are important to performance. Further, the relation between these variables and performance is enhanced by the use of incentives (i.e., the partial correlations between the soldier and unit variables and the performance criteria are less, by about .1, when the use of incentives is controlled for). Since most incentives are readily available and easily used, it seems reasonable that unit leaders should use them frequently to enhance motivation, cohesion, and similar factors. Thereby, unit leaders may increase unit performance and readiness, without the cost of additional manpower, equipment, or training resources.

#### Improving Incentive Management

Together, the questionnaire and interview data indicate that incentives can be better managed in many units. First of all, it appears that incentives should be used more to increase factors such as motivation, pride, and cohesion. This recommendation is supported by the results of the 1991 Army Career Transitions Survey, conducted by ARI for the Office, Deputy Chief of Staff for Personnel, Department of the Army. In the Survey, completed by over four thousand soldiers finishing their current tour of duty, soldiers were asked to indicate aspects of their tour about

which they were satisfied. Only 40% responded that they felt satisfied about the level of recognition they received for their That level of satisfaction was among the lowest for the aspects the Survey investigated. Second, incentives should be made a more routine part of unit life. They should not be based on an imposed quota. Rather they should be initiated from the top down and bottom up, as warranted, and not only after some major event. Third, it appears a greater consensus should be established about who should receive incentives. This might include input from soldiers and should include a discussion with all relevant platoon level leaders. In essence, the time should be taken to correctly identify, in an open and objective manner, those deserving of an incentive. Fourth, it is recommended that family members be kept abreast of unit activities and invited to attend award ceremonies so that the incentives can have maximum effect for the soldier. Finally, incentives should be processed with more administrative priority and efficiency. This means processing any paperwork quickly, tracking the status of an incentive, and awarding it within a reasonably short period of time.

The data do not seem to indicate that any particular type of incentive is that much more effective than another. variety of incentives should probably be used, as they can be made available and are appropriate. The authors recommend an emphasis on incentives that are unit centered, such as public recognition, awards, and letters of commendation. incentives, such as passes, while highly valued by soldiers, have the downside of implying that separation from the unit is a valued outcome and highlighting that unit life is a restrictive environment. In addition, where possible, incentives should be awarded to a small echelon group (e.g., a crew, team, squad, or platoon) instead of to individual soldiers to emphasize that success comes from teamwork, cooperation, and group performance. The current Army is composed of volunteers, not conscripts; incentives should reinforce strong performance, reaffirm values and traditions, and lead to commitment and readiness to accomplish the mission.

#### REFERENCES

- Lindsay, T. J. & Siebold, G. L. (1990). The use of incentives in light infantry units. Proceedings of the 32nd Annual Conference of the Military Testing Association, 438-443.
- Tremble, T. R., Jr. & Alderks, C. E. (1992). Measures for Research on Small Unit Preparedness for Combat Effectiveness (Research Note). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.

#### APPENDIX A

#### QUESTIONNAIRE ITEM AND RESPONSE SCALES

A. Format. The following sections of Appendix A present the questionnaire items forming the scales noted in the report. The item numbers are the original numbers used in the questionnaire. Also provided for each scale are the response alternatives that were available to the squad members. The questionnaires were administered by ARI researchers usually to all squad members in a company at the same time, around two to four weeks prior to their CTC training rotation. The leaders in the platoon were given different questionnaires but responded to them at the same time and location as the squad members. The scales are presented in the same order in which they are referred to in the report.

#### B. Incentives.

Are the following <u>INCENTIVES</u> used <u>EFFECTIVELY</u> in your unit to reward good performance? Use the following scale:

- A = Used often, given to the right people
- B = Used often, sometimes given to the wrong people
- C = Used occasionally, given to the right people
- D = Used occasionally, sometimes for the wrong people
- E = Seldom used

#### Item No.

- 37. Public recognition for a job well done.
- 38. Passes.
- 39. Awards.
- 40. Specialized training courses.
- 41. Letters of appreciation of commendation.
- 42. Promotions.

(The response scale was coded from 5 to 1, with A being 5.)

#### C. Job Motivation.

The next items concern <u>YOUR OWN ATTITUDES</u>. Indicate how much <u>YOU PERSONALLY</u> agree or disagree with each statement below. Use the following scale:

- A = Strongly agree
- B = Agree
- C = Neither agree nor disagree
- D = Disagree
- E = Strongly disagree

#### Regarding your work:

Item No.

- 4. I don't mind taking on extra duties and responsibilities in my work with this platoon.
- 5. I work hard and try to do as good a job as possible.
- 6. I look forward to coming to work every day.
- 7. I am very personally involved in my work.

(The response scale was coded from 5 to 1, with strongly agree coded as 5.)

#### D. CTC Motivation.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

#### Regarding your work:

Item No.

- 8. It really matters to me that we do well at the JRTC/NTC.
- 9. I am putting in extra effort to prepare for the JRTC/NTC.
- 10. I will learn a lot from the training at the JRTC/NTC.

#### E. Job Satisfaction.

The next items also concern  $\underline{YOUR\ OWN\ ATTITUDES}$  toward  $\underline{YOUR\ WORK}$ . Make your choices from the answers provided.

Item No.

- 25. How useful is the work you do most of the time?
  - A = Very useful
  - B = Quite useful
  - C = Somewhat useful
  - D = Slightly useful
  - E = Not at all useful
  - 26. How interesting is your work?
    - A = Very interesting
    - B = Quite interesting
    - C = Somewhat interesting
    - D = Slightly interesting
    - E = Not at all interesting

27. How do you like your work?

A = Like it a lot

B = Like it

C = Borderline

D = Dislike it

E = Dislike it a lot

28. How would you rate your overall job satisfaction?

A = Very high

B = High

C = Borderline

D = Low

E = Very low

(The response scales were coded from 5 to 1, with the A responses being coded as 5.)

#### F. Platoon Pride.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

Item No.

- 18. Squad members are proud to be in this platoon.
- 19. Squad members feel they play an important part in accomplishing this <u>platoon's</u> mission.

#### G. Identification with the Army.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

#### Regarding the Army:

Item No.

- 20. When someone criticizes the Army, it feels like a personal insult.
- 21. I'm interested in what others say about the Army.
- 22. When I talk about the Army, I usually say we instead of they.
- 23. The Army's successes are my successes.
- 24. When someone praises the Army, it feels like a personal compliment.

#### H. Squad Member Cohesion.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

Item No.

- 11. The squad members in this platoon really care about each other.
- 12. The squad members in this platoon work well together as a team.
- 13. The squad members in this platoon pull together to get the job done.
- 14. The squad members in this platoon trust each other.

#### I. Unit Climate for Learning.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

#### In this company:

Item No.

- 29. Soldiers are assigned to the work they have been trained to do.
- 30. Soldiers are given a lot of responsibility for their work.
- 31. Soldiers are encouraged to do things on their own even if they sometimes make mistakes.
- 32. Soldiers get feedback on how they are doing.
- 33. The emphasis in this company is on getting things right and not just on looking good.
- 34. Soldiers can admit their mistakes and are helped to learn from them.
- 35. The leaders have confidence in the soldiers doing their jobs right.
- 36. When assigned new duties, soldiers are provided with quidance and direction.

#### J. Platoon Task and Mission Proficiency/Performance Criteria.

Rate the proficiency of <u>your platoon</u> in each of the areas listed. Use this scale:

- A = Trained
- B = Needs a little training
- C = Needs a lot of training
- D = Untrained

Item No.

- 128. Individual tasks
- 129. Squad/crew tasks130. Movement to contact
- 131. Defense
- 132. Deliberate attack
- 133. Hasty attack.

(Responses were coded 4 to 1, with A = Trained coded as 4; the performance criteria had the same response scale and items, plus additional mission items: raid, ambush, recon & security, retrograde, and overall performance.)

#### CTC Expectations. K.

(The same strongly agree to strongly disagree scale was used as with job motivation.)

#### Our Platoon's experience at the JRTC/NTC will:

Item No.

- Be a realistic test of our combat skills. 134.
- Benefit the squad members, and not just the 135. leadership.
- 136. Allow us to show just how good a platoon we
- 137. Get us useful feedback from the observer/controllers.
- 138. Actually improve our combat readiness.

#### APPENDIX B

#### TABLES--USING 5 POINT RESPONSE SCALE FOR INCENTIVES

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Table B-1
Frequency of Incentive Use: Percentage of Responses for Each 5
Point Scale Value by Incentive

Incentive	Scale value	<u> </u>
Public recognition for a job well done	1 2 3 4 5	26 20 28 16 11
Passes	1 2 3 4 5	26 13 30 16 15
Awards	1 2 3 4 5	27 21 28 15 9
Specialized training courses	1 2 3 4 5	29 20 27 15 9
Letters of appreciation or commendation	1 2 3 4 5	34 16 29 13 9
Promotions	1 2 3 4 5	20 28 22 20 9

Note. N = 995 individual squad members. Scale values were: 1 = seldom used, 2 = used occasionally, sometimes for the wrong people, 3 = used occasionally, given to the right people, 4 = used often, sometimes given to the wrong people, and 5 = used often, given to the right people.

Table B-2

Individual and Platoon Level Means and Standard Deviations for Frequency (5 Point Scale) of Incentive Use by Incentive

	Individua	l level	Platoon level		
Incentive	<u>M</u>	SD	М	SD	
Public recognition for a job well done	2.6	1.3	2.6	.51	
Passes	2.8	1.3	2.8	.55	
Awards	2.5	1.2	2.5	.48	
Specialized training courses	2.5	1.2	2.5	.52	
Letters of appreciation or commendation	2.4	1.3	2.4	.53	
Promotions	2.6	1.2	2.6	.50	
All six incentives	2.6	.93	2.6	.42	

<u>Note</u>. For the individual level,  $\underline{N} = 995$  squad members; for the platoon level,  $\underline{N} = 58$  platoons. Scale used to describe the frequency of incentive use was: 1 = seldom used, 2 = used occasionally, sometimes for the wrong people, 3 = used occasionally, given to the right people, 4 = used often, sometimes given to the wrong people, 5 = used often, given to the right people.

Table B-3

Correlations Between Frequency (5 Point Scale) of Incentive Use and Soldier Variables by Incentive and Soldier Variable

		Soldie	er Varia	able	
Incentive	(1)	(2)	(3)	(4)	(5)
Public recognition for a job well done	.25	.31	.34	.29	.21 .31**
Passes	.23	.24 .35**	.30 .51	.30 .57	.25
Awards	.19 .56	.26 .48	.27 .64	.28 .64	.18
Specialized training courses	.20 .55	.22 .48	.31 .66	.27 .61	.19 .41
Letters of appreciation or commendation	.16 .31**	.21 .45	.22 .55	.28 .54	.14 .30**
Promotions	.24 .45	.26 .46	.31	.29 .48	.23 .53
All six incentives	.29 .55	.35 .56	.41 .71	.40 .67	.28 .49

Note. Soldier variables were questionnaire scales measuring: (1) job motivation, (2) motivation to do well on the CTC rotation, (3) job satisfaction, (4) pride in being a member of one's platoon, and (5) identification with the Army. Scales are provided in Appendix A; scale characteristics are described in Tremble and Alderks (1992). For each incentive, the first row of correlations is at the individual level (N = 995 individual squad members); the second row is at the platoon (mean) level (N = 58 platoons). At the individual level, all correlations are significant at p<.001. At the platoon level, the second row, all correlations are significant at the p<.001 level unless otherwise indicated; then \*\* = p<.01.

Table B-4
Correlations Between Frequency (5 Point Scale) of Incentive Use and Unit Variables by Incentive and Unit Variable

	Unit Variable			
Incentive	(1)	(2)	(3)	(4)
Public recognition for a job well done	.26 .26*	.43	.10 .12x	.30
Passes	.25 .36**	.38 .59	.10** .20x	.23
Awards	.22 .39	.37 .68	.08** .21x	.26 .48
Specialized training courses	.22 .41	.35 .66	.08** .22*	.22
Letters of appreciation or commendation	.23 .28*	.32	.07* 06x	.24 .55
Promotions	.24 .32**	.35 .64	.06* .21x	.25 .58
All six incentives	.33 .41	.51 .75	.12 .18x	.35 .62

Note. Unit variables were questionnaire scales measuring: (1) squad member cohesion, (2) unit climate for learning, (3) platoon task and mission proficiency, and (4) expected value of the CTC training for the platoon. Scales are provided in Appendix A; detailed scale characteristics are described in Tremble and Alderks (1992). For each incentive, the first row of correlations is at the individual level (N = 995 individual squad members); the second row is at the platoon (mean) level (N = 58 platoons). All the correlations are significant at the p<.001 level, unless otherwise indicated; then \* = p<.05. \*\* = p<.01. x = not significant.

Table B-5
Correlations Between Frequency (5 Point Scale) of Incentive Use and Performance Criteria by Incentive and Performance Criterion

Incentive	Performance Criterion			
	(1)	(2)	(3)	
Public recognition for a job well done	.22	01	.11	
Passes	.33	.09	.25*	
Awards	.44*	.25	.21	
Specialized training courses	.26	.22	.13	
Letters of appreciation or commendation	.20	05	.02	
Promotions	.42*	06	.22	
All six incentives	.39*	.08	.19	

Note. Performance criteria were the average rating on mission performance for each platoon during its NTC or JRTC training rotation, with ratings being made by: (1) observer/controllers at the JRTC, (2) company commanders rating their own platoons, and (3) platoon leaders and squad members rating their own platoon's performance. Scales are provided in Appendix A; scale characteristics are described in Tremble and Alderks (1992). For each incentive, the correlations are at the platoon (mean) level. The number of platoons rated, respectively by column were: (1)  $\underline{n}$  = 22, (2)  $\underline{n}$  = 40, and (3)  $\underline{n}$  = 56. \* =  $\underline{p}$ <.05.